Issue

The Wisconsin Enterprise Architecture Team (WEAT) has been requested to provide the State of Wisconsin, Chief Information Officer (CIO) with a recommendation for an operating system to support the installation of IBM Tivoli Identity Manager (TIM) and Tivoli Access Manager (TAM) as an enterprise identity access management system.

In order to ensure all technical issues are fully addressed in this recommendation WEAT, the Server Domain, and technical staff from the Division of Enterprise Technology were consulted in forming the recommendation. The recommendation should be considered as a "Joint WEAT – Server Domain" recommendation.

Sources

➢ IBM's bid response document for the State of Wisconsin's Request for Proposal (RFP) for an enterprise identity access management (IAM) system.

➢ IBM Redbooks for Tivoli Identity Manager, Tivoli Access Manager, and Enterprise Identity Access Management.

➢ Total Cost of Ownership for Entry Level and Mid Range Clusters – A detailed analysis of the total cost of ownership of three different RISC-based server clusters including HP OpenVMS, IBM AIX and Sun Solaris, TechWise Research, February 2004.

➢ Management Update: The Effects of the SCO Lawsuit on IBM AIX Customers, Gartner Group, July 2, 2004.

➢ Statewide Enterprise Server Consolidation Project Appraisal Inventory, Statewide Enterprise Server Consolidation Team Wednesday, September 23, 2004

Unknowns

➢ Number of agencies using Unix in a production environment. Specifically which flavor of Unix, for what application (s), length of time in production and level of Full Time Equivalent (FTE) staff with expertise in Unix support.

➢ A total cost of ownership comparison between the three Unix operating systems; Sun Solaris, HP HP-UX, and IBM AIX.

Joint WEAT – Server Domain Recommendation

WEAT, the Server Domain, and technical staff from the Division of Enterprise Technology (DET) met to discuss the choices available, what issues should be considered when forming a recommendation, and what was discovered in the test period of TIM and TAM as part of the RFP evaluation process.

Intel/Windows platform was eliminated during the test phase, due to concerns regarding scalability. Specifically the Intel/Windows platform's processor and memory performance were inadequate to support the operational needs of an enterprise identity management system using Tivoli Identity Manager and Tivoli Access Manager.

According to IBM the following Unix operating systems (and associated hardware choices) are available, and are listed in order of preference by IBM:
- IBM AIX
- Sun Solaris
- HP HP-UX

WEAT recently made a recommendation for the deployment of Oracle Collaboration Server on HP-UX. As a goal of enterprise architecture is to rationalize and maximize the State's technology investments. It was important to consider HP-UX as the operating system for the deployment of TIM and TAM.

Based upon a through discussion of technical requirements, market share, vendor experiences, and potential risks the <u>group recommended the use of IBM AIX as the operating system for the deployment of TIM and TAM</u>.

Enterprise Architecture Implications

As a result of this recommendation HP-UX and IBM AIX will be the vendor-provided product-level Unix platforms of choice for the enterprise. An exception will be necessary for Solaris deployments within the enterprise.

Further Consideration

A further consideration for the CIO is to move common enterprise internet services from aging Sun Solaris based servers to Linux based servers at a time consistent with cost and investment considerations. Examples of such common internet services include File Transfer Protocol (FTP), Domain Name Service (DNS) and Email List Servers (listservs). Positive experiences within the enterprise implementing common internet services on Linux (i.e. Department of Revenue, Department of Transportation) should encourage DET to implement these services on Linux, and it would be beneficial to consult with those organizations to learn from their experiences. This action would enable the enterprise to gain additional experience, expertise with Linux and would allow DET to move stable internet applications to a lower total cost of ownership platform.